

AMENDMENTS

IN THE CLAIMS:

Please amend claim 1 as provided below:

1. (Currently amended) An optoelectronic arrangement comprising:
a printed circuit board, which defines a first direction parallel to a printed circuit board surface and a second direction perpendicular to the printed circuit board surface,
a first electrical contact-making region of the printed circuit board with a plurality of first contacts,
a receptacle structure arranged on the printed circuit board and having a receptacle opening for receiving a pluggable optoelectronic module,
a pluggable optoelectronic module,
a second electrical contact-making region of the optoelectronic module with a plurality of second contacts, and
plug-in means for plugging the optoelectronic module into the receptacle structure initially in the first direction, and then in the second direction, resulting in a plugged-in position, ~~in such a way that, during the plug-in operation, the module is firstly introduced into the receptacle structure in the first direction and is then lowered in the second direction in the direction of the printed circuit board,~~
wherein the second contacts of the optoelectronic module are in electrical contact with the first contacts of the printed circuit board in the plugged-in position.

2. (Previously presented) The arrangement according to Claim 1, wherein the plug-in means comprises a locking/unlocking mechanism formed on the module, by means of which mechanism the module is raised or lowered in the second direction.

3. (Previously presented) The arrangement according to Claim 1, wherein the module comprises a module housing with an end side, a rear side, a top side, an underside and two side walls, and configured to receive at least one optical plug into the module via the end side.

4. (Previously presented) The arrangement according to Claim 2, wherein the locking/unlocking mechanism comprises a lever configured to move between two end positions at the end side of the module, the module being in a locked state with respect to the printed circuit board in one end position of the lever.

5. (Previously presented) The arrangement according to Claim 4, wherein the locking/unlocking mechanism further comprises two arms acting as a lever, which are mounted in rotatable fashion at opposite side walls of the module housing in each case at a bearing location.

6. (Previously presented) The arrangement according to Claim 5, wherein the arms, on the other side of the bearing location opposite the end side, in each case are configured to form at least two end regions at a different distance from the bearing location, wherein one of said arm end regions contacts the printed circuit board or the receptacle structure in one end position of the lever and the other of said arm end regions contacts the printed circuit board or the receptacle structure in the other end position of the lever.

7. (Previously presented) The arrangement according to Claim 6, wherein the arms each branch at their ends in Y-shaped fashion to form two sub-arms in such a way that one sub-arm is in contact with the printed circuit board or the receptacle structure in the one end position of the lever and the other sub-arm is in contact with the printed circuit board or the receptacle structure in the other end position of the lever.

8. (Previously presented) The arrangement according to Claim 2, wherein the locking/unlocking mechanism comprises elements which protrude from at least one outer area of the module housing in the locked state of the module.

9. (Previously presented) The arrangement according to Claim 1, wherein the plug-in means comprises guiding means which provide a guiding of the module in the receptacle structure during the movement of the module in the first direction.

10. (Previously presented) The arrangement according to Claim 1, further comprising spring means configured to press the plug-in module onto the printed circuit board with a spring force directed perpendicular to said printed circuit board surface.

11. (Previously presented) The arrangement according to Claim 10, wherein the spring means resides on the receptacle structure.

12. (Previously presented) The arrangement according to Claim 1, for the positioning of the module in the first direction, the module comprising first positively locking elements and the printed circuit board comprising second positively locking elements, wherein the first and second positively locking elements intermesh when the module is plugged in.

13. (Previously presented) The arrangement according to Claim 12, the first positively locking elements of the module comprising at least two projecting pins and the second positively locking elements of the printed circuit board comprising correspondingly arranged holes.

14. (Previously presented) The arrangement according to Claim 1, further comprising a latching mechanism configured to impede the module in the plugged-in position from moving in the second direction away from the printed circuit board surface.

15. (Previously presented) The arrangement according to Claim 14, wherein the latching mechanism comprises spring elements which latch with structures of the module during the plug-in operation after the lowering of the module in the second direction.

16. (Previously presented) The arrangement according to Claim 14, wherein the locking/unlocking mechanism is configured to deactivate the latching mechanism when the module is raised in the second direction.

17. (Previously presented) The arrangement according to Claim 1, wherein the second contacts of the module and the first contacts of the printed circuit board in each case are arranged in the form of a two-dimensional matrix.

18. (Previously presented) The arrangement according to Claim 3, wherein the second electrical contact-making region of the optoelectronic module with the plurality of second contacts is formed by a plug base arranged on the underside of the module housing.

19. (Previously presented) The arrangement according to Claim 18, wherein the second contacts arranged at the plug base are formed in an elastically deformable fashion.

20. (Previously presented) The arrangement according to Claim 1, wherein some of the second contacts are formed in a mechanically leading fashion, in such a way that a defined electrical contact-making order is provided during the plugging-in and during the removal of the module.

21. (Previously presented) The arrangement according to Claim 1, wherein the first electrical contact-making region of the printed circuit board is formed directly on the surface of the printed circuit board, and the first contacts are formed by metallizations directly on the surface of the printed circuit board.

22. (Original) The arrangement according to Claim 1, further comprising a heat sink configured to project into the receptacle structure via an opening at the top side of the receptacle structure and make large-area mechanical contact with the module in the plugged-in position.

23. (Original) The arrangement according to Claim 22, further comprising a spring means configured to press the heat sink against the plugged-in module with a spring force.

24. (Original) The arrangement according to Claim 23, wherein the spring means is supported at the receptacle structure and correspondingly additionally presses, in the plugged-in position of the module, the second electrical contact-making region of the module against the first electrical contact-making region of the printed circuit board.

25. (Original) The arrangement according to Claim 24, wherein the spring means comprises two side parts running parallel to one another and respectively connected to one side of the receptacle structure, and wherein the spring means further comprises at least two spring arms that are formed in resilient fashion and connect the side parts together, wherein the spring arms partly rest on the heat sink and exert a spring force on the heat sink in the second direction.

26. (Previously presented) The arrangement according to Claim 1, wherein the receptacle structure comprises a shielding cage comprising an electrically conductive material.

27. (Previously presented) The arrangement according to Claim 26, wherein the shielding cage comprises at its underside a plurality of protruding pins via which the shielding cage is mechanically fixedly connected to the printed circuit board.

28. (Previously presented) The arrangement according to Claim 27, wherein the shielding cage is electrically connected to a shielding potential of the arrangement via the protruding pins.

29. (Previously presented) The arrangement according to Claim 26, wherein the printed circuit board comprises a metallization on the printed circuit board surface in the region covered by the shielding cage and having a cut-out portion therein corresponding to the first electrical contact-making region, at its top side.

30. (Previously presented) The arrangement according to Claim 1, wherein the module comprises a parallel optoelectronic module via which data can be emitted or received in parallel on a plurality of optical channels.